

No.

200400163



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Monsanto Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1587, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Cooper'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fourteenth day of June, in the year two thousand and four.

Attest:

P. L. M. Jones

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Arthur C. Freeman

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the privacy Act of 1974 (5 U.S.C. 552a)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421) Information is held confidential until certificate is issued (7 U.S.C. 2426).

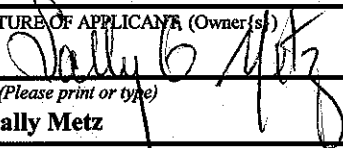
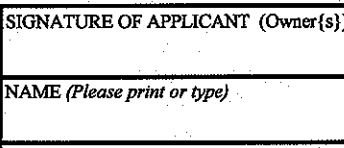
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER		3. VARIETY NAME	
Monsanto Company		M98-2023		Cooper	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)		5. TELEPHONE (include area code)		FOR OFFICIAL USE ONLY PVPO NUMBER 200400163	
800 N. Linbergh Blvd. Mail Zone:E3NA Creve Coeur, Missouri 63167		314.694.6089			
		6. FAX (include area code)		F I L I N G DATE	
		314.694.7250		MARCH 31, 2004	
7. GENUS AND SPECIES NAME		8. FAMILY NAME (Botanical)		FILING AND EXAMINATION FEE: DATE	
Triticum aestivum		Gramineae		3/31/2004	
9. CROP KIND NAME (common name)				DATE Fee:	
Soft Red Winter Wheat				3652.00	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (common name)				CERTIFICATION FEE	
Corporation				432	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION		DATE	
Delaware		1933		5/04/2004	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS				14. TELEPHONE (include area code)	
Ms. Sally Metz 800 N. Lindbergh Blvd. Creve Coeur, Missouri 63167		AND Dr. Rollin Sears 6515 Ascher Road Junction City, Kansas 66441		314.694.6089	
				15. FAX (include area code)	
				314.694.7250	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (follow instructions on reverse)					
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety					
b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness					
c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety					
d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety					
e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership					
f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds, or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)					
g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)					
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)					
<input checked="" type="checkbox"/> YES (if "yes", answer items 18 and 19 below) <input type="checkbox"/> NO (if "no", go to item 20)					
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?					
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
19. IF 'YES' TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDERS SEED?					
<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED					
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?					
<input type="checkbox"/> YES (if "YES", give names of countries and dates) <input checked="" type="checkbox"/> NO					
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.					
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.					
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT (Owner(s))			SIGNATURE OF APPLICANT (Owner(s))		
					
NAME (Please print or type)			NAME (Please print or type)		
Sally Metz			Dr. Rollin Sears		
CAPACITY OR TITLE		DATE	CAPACITY OR TITLE		DATE
Director Wheat Technology		1-28-04			

Exhibit A.
Origin and Breeding History of Cooper

M98-2023 (Cooper) is a soft red winter wheat developed by Agripro Wheat located at Brookston Indiana. It was crossed in the 1992 fall greenhouse having the pedigree Pioneer 2510 / Jackson. Pioneer 2510 was a released variety from Pioneer and Jackson a released variety from Virginia Tech. A bulk breeding method was used to develop M98-2023. F1, F2, F3 and F4 populations were grown in Indiana. From the F4 bulk population 125 heads were selected and planted as head rows. M98-2023 began preliminary yield testing in 1998. M98-2023 was selected for short height, disease resistance and yield performance.

In 2000, 100 head rows were grown at Lafayette, Indiana and evaluated for phenotypic similarity. Eighty-five rows were selected, bulked and sent to Berthoud, Colorado for an initial 0.2 acre Breeders seed increase. In 2002 a two acre Breeders seed increase was grown in Hereford, Texas, which produced 10,480 pounds of Breeders seed. In 2003, seven acres of Cooper were grown in Lucerne, Colorado to produce 32,187 pounds of Registered seed.

Cooper has been uniform and stable since 2002. Less than 0.8% of the total plants were rogued from either the initial Breeders seed increase in 2002 or the Breeders seed field in 2003. Approximately 80% of the variant plants were taller height wheat plants and approximately 10% of the variant plants were awned wheat plants. Up to 1.0% variant plants may be encountered in subsequent generations.

Exhibit B.
Statement of Distinctness

Cooper is most similar to the soft red winter wheat 'Benton'. However, it can be easily distinguished by the following morphological characteristics:

- Cooper has a short glume length (Berthoud, CO 2001, 2002, 2003).
Benton has a medium glume length (Berthoud, CO 2001, 2002, 2003).
- Cooper has a medium glume width (Berthoud, CO 2001, 2002, 2003).
Benton has a wide glume width (Berthoud, CO 2001, 2002, 2003).
- Cooper has short brush hairs on the seed (Berthoud, CO 2001, 2002, 2003). Benton has long brush hairs on the seed (Berthoud, CO 2001, 2002, 2003).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* Spp.)

NAME OF APPLICANT(S)

Monsanto Company

FOR OFFICIAL USE ONLY

PVPO NUMBER **200400163**

ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)
800 N. Linbergh Blvd.
Creve Coeur, MO 63167

NAME OR EXPERIMENTAL
DESIGNATION
Cooper

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in the first box when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized standard may be used to determine plant colors; designate system used.

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

1 1=Common 2=Durum 3=Club 4=Other (specify) _____

2. VERNALIZATION:

2 1=Spring 2=Winter 3=Other (specify) _____

3. COLEOPTILE ANTHOCYANIN:

1 1=Absent 2=Present

4. JUVENILE PLANT GROWTH:

2 1=Prostrate 2=Semi-erect 3=Erect

5. PLANT COLOR (boot stage):

3 1 = Yellow-Green 2 = Green 3 = Blue-Green

6. FLAG LEAF (boot stage):

1 1 = Erect 2 = Recurved

2 1 = Not Twisted 2 = Twisted

7. EAR EMERGENCE:

0 0 Number of Days Earlier Than _____ *

0 1 Number of Days Later Than Patton *

8. ANTHR COLOR:

1 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

0 0 cm Taller Than _____ *

1 0 cm Shorter Than Patton *

* Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

200400163

10. STEM:

A. ANTHOCYANIN

☒ 1 = Absent 2 = Present

B. WAXY BLOOM

☒ 2 = Absent 2 = PresentC. HAIRINESS (*last internode of rachis*)☒ 2 = Absent 2 = PresentD. INTERNODE (*specify number*)☒ 1 = Hollow 2 = Semi-solid 3 = Solid

E. PEDUNCLE

☒ 1 = Erect 2 = Recurved☒ 0 ☒ 6 cm Length11. HEAD (*at Maturity*):

A. DENSITY

☒ 2 = Lax 2 = Middense 3 = Dense

B. SHAPE

☒ 2 = Tapering 2 = Strap 3 = Clavate 4 = Other (*specify*)

C. CURVATURE

☒ 2 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

☒ 2 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned12. GLUMES (*at Maturity*):

A. COLOR

☒ 1 = White 2 = Tan 3 = Other (*specify*)

B. SHOULDER

☒ 2 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

☒ 1 = Obtuse 2 = Acute 3 = Acuminate

D. LENGTH

☒ 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

☒ 2 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

☒ 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

☒ 1 = Rounded 2 = Angular

C. BRUSH

☒ 1 = Short 2 = Medium 3 = Long☒ 1 = Not Collared 2 = Collared

D. CREASE

☒ 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel☒ 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

13. SEED: (continued)

E. COLOR

☒ 3 1 = White 2 = Amber 3 = Red 4 = Other (specify) _____

F. TEXTURE

☒ 2 1=Hard 2=Soft

G. PHENOL REACTION (see instructions):

☒ 0 1 = Ivory 2 = Fawn 3 = Light Brown 4 = Dark Brown 5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

<input checked="" type="checkbox"/> 0 Stem Rust (<i>Puccinia graminis</i> f. sp. <i>tritici</i>) Field races	<input checked="" type="checkbox"/> 3 Leaf Rust (<i>Puccinia recondita</i> f. sp. <i>tritici</i>) Field races
<input checked="" type="checkbox"/> 3 Stripe Rust (<i>Puccinia striiformis</i>)	<input checked="" type="checkbox"/> 0 Loose Smut (<i>Ustilago tritici</i>)
<input checked="" type="checkbox"/> 0 Tan Spot (<i>Pyrenophora tritici-repentis</i>)	<input checked="" type="checkbox"/> 0 Flag Smut (<i>Urocystis agropyri</i>)
<input checked="" type="checkbox"/> 0 Halo Spot (<i>Selenophoma donacis</i>)	<input checked="" type="checkbox"/> 0 Common Bunt (<i>Tilletia tritici</i> or <i>T. laevis</i>)
<input checked="" type="checkbox"/> 0 <i>Septoria nodorum</i> (Glume Blotch)	<input checked="" type="checkbox"/> 0 Dwarf Bunt (<i>Tilletia controversa</i>)
<input checked="" type="checkbox"/> 0 <i>Septoria avenae</i> (Speckled Leaf Disease)	<input checked="" type="checkbox"/> 0 Karnal Bunt (<i>Tilletia indica</i>)
<input checked="" type="checkbox"/> 3 <i>Septoria tritici</i> (Speckled Leaf Blotch) Field races	<input checked="" type="checkbox"/> 3 Powdery Mildew (<i>Erysiphe graminis</i> f. sp. <i>tritici</i>) Field races
<input checked="" type="checkbox"/> 0 Scab (<i>Fusarium</i> spp.)	<input checked="" type="checkbox"/> 0 Snow Molds
<input checked="" type="checkbox"/> 0 Black Point (Kernel Smudge)	<input checked="" type="checkbox"/> 0 Common Root Rot (<i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.)
<input checked="" type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV)	<input checked="" type="checkbox"/> 0 Rhizoctonia Root Rot (<i>Rhizoctonia solani</i>)
<input checked="" type="checkbox"/> 0 Soilborne Mosaic Virus (SBMV) Field races	<input checked="" type="checkbox"/> 0 Black Chaff (<i>Xanthomonas campestris</i> pv. <i>translucens</i>)
<input checked="" type="checkbox"/> 0 Wheat Yellow (Spindle Streak) Mosaic Virus Field races	<input checked="" type="checkbox"/> 0 Bacterial Leaf Blight (<i>Pseudomonas syringae</i> pv. <i>syringae</i>)
<input checked="" type="checkbox"/> 0 Wheat Streak Mosaic Virus (WSMV) Field races	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Other (specify) _____

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

<input checked="" type="checkbox"/> 1	Hessian Fly (<i>Mayetiola destructor</i>)	<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/> 0	Stem Sawfly (<i>Cephus</i> spp.)	<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/> 0	Cereal Leaf Beetle (<i>Oulema melanopa</i>)	<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/> 0	Russian Aphid (<i>Diuraphis noxia</i>)	<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/> 0	Greenbug (<i>Schizaphis graminum</i>)	<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/> 0	Aphids		_____

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

None

Exhibit D.
Additional Description of Cooper

Cooper is a soft red winter wheat developed by Agripro Wheat. Cooper is a medium height, medium maturity, very good test weight wheat. Cooper has very good straw strength a requirement for intensively managed production systems. In both intensive and standard production Cooper has shown consistent yield and test weight in the double cropping region of the soft red production area. Cooper has shown intermediate or moderate susceptibility to the predominant diseases in this region.

Juvenile growth habit is semierect. Plant color is blue-green at boot stage. The flag leaf is erect and twisted. Anther color is yellow. Auricle anthocyanin and auricle hairs are present. Waxy bloom is present on the stem, flag leaf sheath and head. The head is strap, middense and apically awnletted. The glume at maturity is short in length and medium in width. Shoulder shape on the glume is oblique with an obtuse beak. Seed shape is ovate. Brush hair length is short. Seed cheeks are rounded and crease width is narrow and depth is shallow.

Cooper is primarily adapted to Indiana, Illinois, Ohio, Missouri and Kentucky. Limited testing indicates a secondary adaptation to Wisconsin, Michigan, Arkansas, Virginia, and Maryland.

AgriPro Wheat

SOFT WHEAT QUALITY SUMMARY

Year	LabNo	Loc-Code	Milling		Baking Quality				
			Brk Flr %	Tot Flr %	Wht Prot 14%mb	Flr Prot 14%mb	C.Diam mm	T.G Norris R Hard	
COOPER									
2002	7353	FO-91120	43.8	70.2	10.1	8.4	19.2	3	19
2002	7287	HN-91120	39.8	67.2	12.4	10.6	18.5	7	15
2000	7353	HN-91329	45.1	69.4	9.8	8.1	19.0	5	5
2000	7283	LF-91329	43.6	69.7	10.0	8.5	19.2	4	7
1999	7137	CI-81717	41.9	68.6	8.6	7.5	19.3	4	13
1999	7066	LF-81717	40.6	67.0	10.7	9.1	18.2	6	12
		Average	42.5	68.7	10.3	8.7	18.9	5	12
CALDWELL									
2002	7356	FO-91130	45.2	70.3	10.1	8.4	19.2	3	19
2002	7290	HN-91130	42.4	68.4	11.8	10.2	18.7	4	14
2000	7346	HN-91301	48.2	69.9	9.3	7.6	20.0	2	6
2000	7276	LF-91301	42.7	68.3	11.5	9.6	19.3	4	11
1999	7134	CI-81701	44.9	68.2	9.3	7.8	19.2	3	9
1999	7063	LF-81701	43.5	67.0	10.6	9.0	18.7	4	13
		Average	44.5	68.7	10.4	8.8	19.2	3	12

TG=Cookie Top Grain

Ratings: 1=Excellent 9=Unacceptable

Yield data:

M98-2023	2003	2002	2001
Bu/A	82	74	67
% of trial mean	104%	113%	106%
Reps	2	2	2
# Locs	11	11	9
ChecksBW 486	76	Hopewell 63	Patterson 62
Patton	79	Patton 64	Patton 66
Pio		Pio	
25R37	86	25R37 71	Pio 2540 64
Roane	76	Roane 67	Roane 63

2003 Test locations:

Ohio: Findlay, Ansonia

Indiana: Brookston, Haubstadt, Woodburn

Illinois: Carmi, Pana, St. Jacobs

Missouri: Sikeston

Kentucky: Hopkinsville

Arkansas: Jonesboro

2002 Test locations:

Ohio: Findlay, Ansonia, Marion

Indiana: Brookston, Haubstadt, Sullivan

Illinois: Carmi, Pana, St. Jacobs

Missouri: Sikeston

Arkansas: Jonesboro

2001 Test locations:

Ohio: Findlay, Ansonia, Marion

Indiana: Haubstadt, Woodburn

Illinois: Carmi, Pana, St. Jacobs

Missouri: Sikeston

Agronomic Data

	2003	2002	2001
Height			
M98-2023	37 in	35 in	35 in
Patton	42 in	38 in	39 in
Heading	Julian		
	days		
M98-2023	126	132	125
Patton	125	131	124
Test Weight	#/Bu.		
M98-2023	55	57	59
Patton	54	56	60

2003 Disease Notes {1-9 scale with 1 best}

	Tan Spot	Sept Nodorum	Sept tritici	FHB	BYDV	SBMV	Leaf Rust	Powdery Mildew	Stripe Rust
M98-2023	5		5	6		4		4	5
Patton	3		5	4		3		6	7

Tan spot: Ansonia OH
 Septoria nodorum:
 Septoria tritici: Carmi IL, Marion OH, Columbia MO, Haubstadt IN
 FHB: Carmi IL, St. Jacobs IL, Haubstadt IN
 BYDV:
 SBMV: Urbana IL, Everest KS
 Leaf rust:
 Powdery mildew: Brookston IN, Marion OH, Clarksville MD
 Stripe rust: St. Jacobs IL, Columbia MO, Haubstadt IN

2002 Disease Notes {1-9 scale with 1 best}

	Tan Spot	Sept Nodorum	Sept tritici	FHB	BYDV	SBMV	Leaf Rust	Powdery Mildew	Stripe Rust
M98-2023		3	4			3	5	3	6
Patton		5	5			5	4	4	8

Tan spot:
 Septoria Nodorum: Carmi IL, St. Jacobs IL
 Septoria Tritici: Haubstadt IN, Sullivan IN, Carmi IL, St. Jacobs IL
 FHB:
 BYDV:
 SBMV: Sullivan IN, Urbana IL
 Leaf rust: Sullivan IN,
 Powdery mildew Findlay OH, Marion OH
 Stripe rust: Jonesboro, AR

2.b.

	Biotype B	Biotype C	Biotype D	Biotype E	Biotype L
M98-2023	Sus.	Sus.	Sus.	Sus.	Sus.

Data from 2001-2002 Uniform Eastern Nursery

Exhibit E.
Statement of the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was developed by Curtis Beazer, an employee of Agripro Wheat. By agreement between employees and Agripro Wheat all rights to any invention, discovery, or development made by the employee while employed by Agripro Wheat, were assigned to Agripro Wheat, with no rights of any kind pertaining to 'Cooper' being retained by the employees.

By contractual agreement the variety 'Cooper' was purchased from Agripro Wheat, a business unit of Advanta USA, Inc. in June of 1996 and is currently owned by Monsanto Company.